MASTER SYLLABUS

COURSE NO., HOURS, AND TITLE:

MHI 515-3, Systems Analysis, Design, and Database Management in Health Care

REQUIRED TEXTBOOK(S):

See Textbook Listing at: <u>http://sah.siu.edu/_common/documents/health-</u>informatics/mhi%20textbook%20list.pdf

COURSE DESCRIPTION:

Students explore methods for designing and managing health care organization databases and their use in computer based information systems. Focuses is given on the impact that health care information systems have on administrative functions, data security and integrity, and business processes. Use of relational database management software, network hardware technologies, data modeling, clinical data warehousing and mining are explored, as well as, the tools necessary for successful system implementation and human computer interfaces.

PREREQUISITE: N/A

COURSE OBJECTIVES: Upon completion of the course, students will be able to:

- 1. Understand varying methods for designing and managing health care organizations.
- 2. Identify databases and understand their use in computer based systems
- 3. Understand the impact that healthcare information systems have on administrative functions and decision making
- 4. Understand the importance of data security and integrity in patient care environments
- 5. Review varying types of relational database management software
- 1. Identify network hardware technologies
- 2. Conduct data modeling, clinical warehousing, and data mining processes.

TOPICAL OUTLINE:

| I. | Information Technology in healthcare | 10% |
|------|---|-----|
| II. | Healthcare Information Technology | 10% |
| III. | Systems Security and Integrity | 20% |
| IV. | Regulatory Standards and Compliance | 10% |
| V. | Administrative Decision Making | 20% |
| VI. | Data Concepts and System Implementation | 30% |

GRADING SCALE:

1000-900 = A, 899 - 800 = B, 799 - 700 = C, 699-600 = D, 599-0 = F

COURSE DELIVERABLES:

| 4 @ 50 = 200 |
|---------------|
| 4 @ 50 = 200 |
| 4 @ 100 = 400 |
| 2 @ 100 = 200 |
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WEEKLY SCHEDULE

| Week 1 | Information Technology in healthcare | |
|--------|--|--------|
| Week 2 | Information Technology in healthcare, Healthcare | |
| | Information Technology | |
| Week 3 | Healthcare Information Technology | |
| Week 4 | Systems Security and Integrity | |
| Week 5 | Systems Security and Integrity, Regulatory | Test 1 |
| | Standards and Compliance | |
| Week 6 | Administrative Decision Making | |
| Week 7 | Data Concepts and System Implementation | |
| Week 8 | Data Concepts and System Implementation | Test 2 |

INSTRUCTOR INFORMATION:

Name: TBA Office: TBA Telephone: TBA Office Hours: TBA

COURSE REQUIREMENTS:

Purchase all required texts and keep all handouts, attend all lectures, complete required examinations and quizzes.

ATTENDANCE POLICY:

The instructor must be notified prior to class if you are going to be absent. One percent of total grade will be deducted for every class missed.

PREREQUISITES: Instructor approval.

LATE WORK POLICY:

No late work will be accepted or allowed.

COURSE CLASSROOM and TIME:

Distance Education

CLASSROOM BEHAVIOR:

The classroom is a "safe" environment for students. The focus will be on learning. Causing disruptions, harassment of other students, foul language, disrespect for others, or entertaining at someone else's expense will not be tolerated. For a detailed explanation of Student Code, consult "Student Conduct Code" found in <u>Important information for</u> <u>siuc students, faculty, and staff.</u> All other rules of the code must be followed. The Student Conduct Code is available at: http://www.siuc.edu/~policies/policies/conduct.html

Academic Honesty:

All students are expected to adhere to a strict code of academic honesty. Academic dishonesty will be addressed according to the "Policies and Procedures Applicable to Academic Dishonesty" as stated in the "Important Information for Students, Faculty, & Staff" booklet.

From the "Student Conduct Code", section II, article A:

Acts of Academic Dishonesty:

- 1. Plagiarism, representing the work of another as one's own work;
- 2. Preparing work for another that is to be used as that person's own work;
- 3. Cheating by any method or means;
- 4. Knowingly and willfully falsifying or manufacturing scientific or educational data and representing the same to be the result of scientific or scholarly experiment or research;
- 5. Knowingly furnishing false information to a university official relative to academic matters;
- 6. Soliciting, aiding, abetting, concealing, or attempting conduct in violation of this code.

Sanctions will be imposed for violations of this policy in accordance with the Student Conduct Code. A copy of the "Important Information for Students, Faculty & Staff" booklet can be obtained from the Office of the Vice Chancellor for Student Affairs, Mailcode 4308, Southern Illinois University, Carbondale, IL 62901-4308.

ADA Accommodations:

In keeping with the goal of the implementation of the Americans with Disabilities Act (ADA), all students for whom this act applies should notify the instructor no later than

the second session of the course so that arrangements can be made for accommodations to meet your educational needs and maximize learning.

Emergency Procedures:

Southern Illinois University Carbondale is committed to providing a safe and healthy environment for study and work. Because some health and safety circumstances are beyond our control, we ask that you become familiar with the SIUC Emergency Response Plan and Building Emergency Response Team (BERT) program. Emergency response information is available on posters in buildings on campus, available on the BERT's website at <u>www.bert.siu.edu</u>, Department of Public Safety's website <u>www.dps.siu.edu</u> (disaster drop down) and in the Emergency Response Guidelines pamphlet. Know how to respond to each type of emergency.

Instructors will provide guidance and direction to students in the classroom in the event of an emergency affecting your location. It is important that you follow these instructions and stay with your instructor during an evacuation or sheltering emergency. The Building Emergency Response Team will provide assistance to your instructor in evacuating the building or sheltering within the facility.

SIU POLICY ON "INCOMPLETE" AS A COURSE GRADE

An INC assigned when, for reasons beyond their control, students engaged in passing work are unable to complete all class assignments. An INC must be changed to a complete grade within a time period designated by the instructor but not to exceed one year from the close of the term in which the course was taken, or graduation whichever occurs first. Should the student fail to complete the course within the time period designated, not to exceed one year, or graduation, whichever comes first, the incomplete will be converted to a grade of F and the grade will be computed in the students grade point average. Students should not register for courses in which an INC has been assigned with the intent of changing the INC grade. Re-registration will not prevent the INC from being changed to an F.

MOBILE TECHNOLOGY POLICY

No mobile devices are allowed during class unless first Okayed by the instructor.

STATEMENT ON INCLUSIVE EXCELLENCE

SIU contains people from all walks of life, from many different cultures and sub-cultures, and representing all strata of society, nationalities, ethnicities, lifestyles, and affiliations. Learning from and working with people who differ from you is an important part of your education in this class, as well an essential preparation for your career.

STATEMENT ON ACADEMIC HONESTY/PLAGIARISM

As defined by the SIUC <u>Student Conduct Code</u>, acts of academic dishonesty include, but are not limited to:

- 1. <u>Plagiarizing</u> or representing the work of another as one's own work;
- 2. Preparing work for another that is to be used as that person's own work;
- 3. Cheating by any method or means;

4. Knowingly or willfully falsifying or manufacturing scientific or educational data and

representing the same to be the result of scientific or scholarly experiment or research;

5. Knowingly furnishing false information to a university official relative to academic

matters;

6. Soliciting, aiding, abetting, concealing, or attempting acts of academic dishonesty.

RESOURCES FOR ADDITIONAL ACEDEMIC HELP

Supplementary Assistance: With cooperation of SIU's Disability Support Services (DSS), each student who qualifies for reasonable supplementary assistance has the right to receive it. Students requesting supplementary assistance must first register with DSS in Woody Hall B-150, (453-5738) or <u>http://disabilityservices.siu.edu/</u>

Notice: If you have any type of special need(s) or disability for which require accommodations to promote learning in this class, please contact me as soon as possible. The Office of Disability Support Services (DDS) offers various support services and can help you with you with special accommodations. You may wish to contact DDS at 453-5738 or go to Room 150 at Woody Hall to verify your eligibility and options for accommodations related to your special need(s) or disability.

SIU EMAIL POLICY

Official SIU student Email Policy: <u>http://policies.siu.edu/policies/email.htm</u>

SIU Student Conduct Code: http://policies.siu.edu/documents/StudentsConductCodeFINALMay32011.pdf

SALUKI CARES

The purpose of Saluki Cares is to develop, facilitate and coordinate a university-wide program of care and support for students in any type of distress-physical, emotional, financial, or personal. By working closely with faculty, staff, students and their families, SIU will continue to display a culture of care and demonstrate to our students and their families that they are an important part of the community. To make a referral to Saluki Cares click, call or send:

http://salukicares.siu.edu/index.html; (618) 453-5714. Or siucares@siu.edu